

How can countries use cross-national research results to address "the big policy issues"? Case studies from Francophone Africa

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1. Introduction

The “Program on the Analysis of Education Systems“ (PASEC¹) was launched in 1991 at the conference of francophone education ministers (CONFEMEN) in Djibouti and carried out its first country evaluation one year later in the same country. Since then, 13 individual country evaluations have been carried out in francophone sub-Saharan Africa, including panel studies following primary students from 2nd to 6th grade within a given country. While initially, these evaluations were implemented by various research teams of the north, from 1995 onwards, implementation was assured by national PASEC teams under the guidance and overall responsibility of the CONFEMEN secretariat in Dakar. This development ensured a higher degree of comparability between individual country studies, the building up of an international database including all micro data for students, teachers and schools, and, above all, a strong involvement of local PASEC teams with the objective of capacity building for future assessments of education quality.

The primary objective of PASEC evaluations is not the comparison of student achievement across countries, but the analysis of key factors relevant to foster educational quality. Given the tight budget constraints limiting educational expenditure in most sub-Saharan African countries, PASEC attempts to derive a hierarchy of potential educational interventions in terms of their efficiency. To do this, their impact in terms of enhanced student achievement is related to a rough estimation of their cost. Student achievement itself is measured in terms of test results of 2nd and 5th graders in mathematics and French. The regular administration of a pretest to all students in the sample at the beginning of the academic year controls for prior performance so that the estimated impact of policy variables measured during a particular year can be correctly attributed to students’ learning within the same time period.

¹ Official French title: “Programme d’analyse des systèmes éducatifs de la CONFEMEN”, where CONFEMEN stands for “Conférence des ministres de l’éducation des pays ayant le français en partage”.

Created at the initiative of education ministers with the clear objective to inform educational decision making, the translation of PASEC results into actual education policy has yet not been automatic. This paper will discuss specific procedures and measures adopted in order to ensure that PASEC results are actually taken into account by policy makers and other target groups within the education sector. Moreover, this paper will illustrate to what extent PASEC has already contributed to concrete educational policy reform. As the interaction of different participants in PASEC evaluations plays an important role in this context, Section 2 will provide an initial description of the typical process of a PASEC evaluation, from the formulation of the evaluation proposal, over its implementation on the ground, to the dissemination of results and the promotion of further analysis. Section 3 will illustrate the advantages and shortcomings of this procedure at the example of particular country cases, focusing notably on the panel analysis for Senegal and thematic studies for Guinea and Togo. Section 4 will present some conclusions in terms of necessary institutional conditions for the successful translation of PASEC results into concrete educational policy.

2. The management of a typical PASEC evaluation

At each biannual CONFEMEN meeting at ministerial level, a decision is taken about the number and orientation of future PASEC evaluations. This is the starting point for the elaboration of evaluation proposals by CONFEMEN member countries. Alongside with their general expression of interest, countries can suggest specific thematic orientations which may be integrated through the adaptation of student, teacher and/or director questionnaires. Country proposals are selected by the PASEC scientific board in cooperation with the PASEC counselors of the CONFEMEN secretariat.

Once a country proposal has been selected, the national CONFEMEN representative is responsible for the creation of an interdisciplinary group of experts, within the ministry of education, who takes over the actual implementation of the PASEC evaluation. This local PASEC team benefits of several training sessions by the PASEC counselors. It is responsible for the management of funds. In cooperation with the counselors, it elaborates the adjusted questionnaires, trains the test administrators sent to the schools, manages the data entry, and participates in the analysis and the drafting of the country report. Once a first draft of this report is available, it is discussed in the PASEC scientific board and finalized by the counselors – again in cooperation with the local PASEC team. Concrete policy

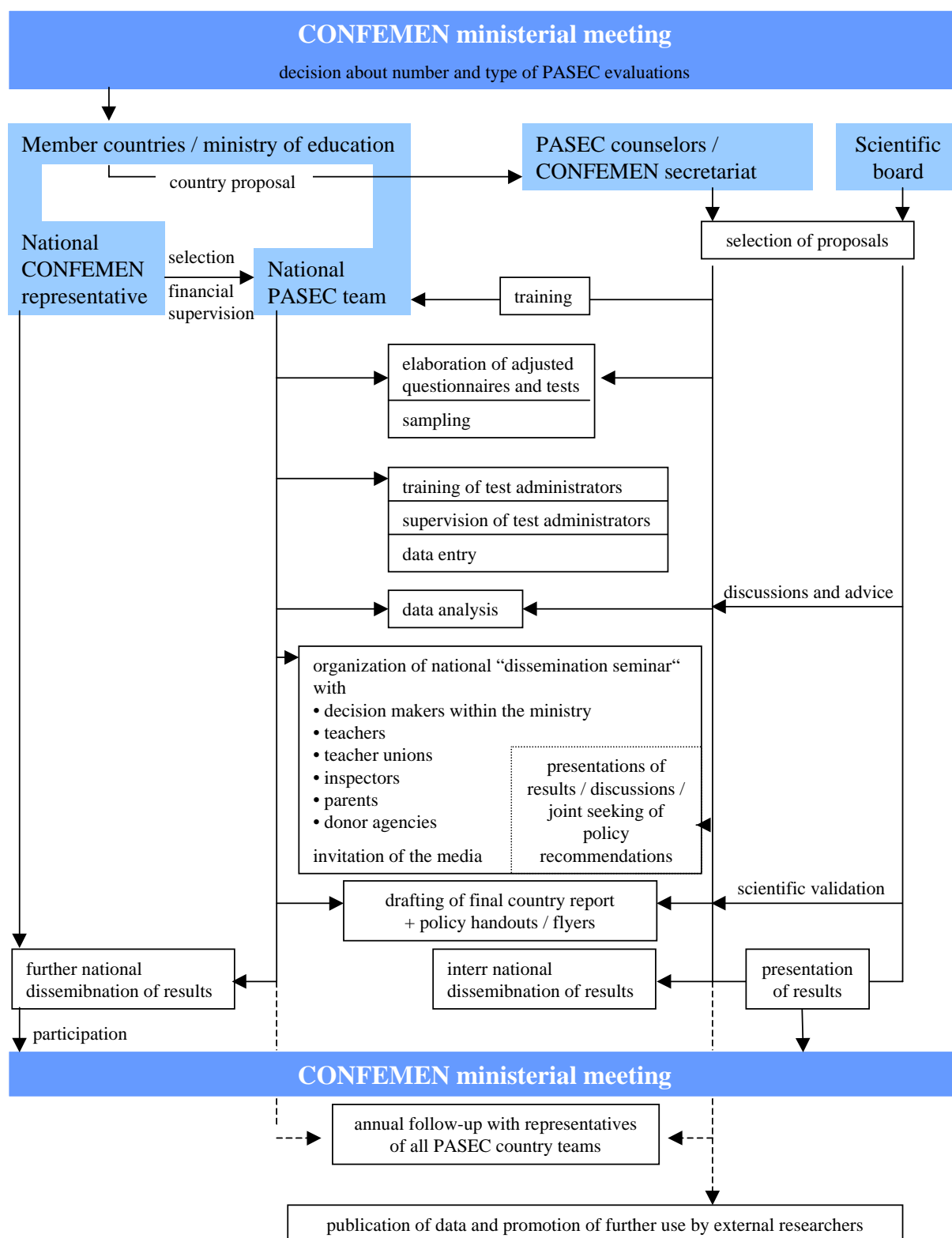
recommendations to be added to the analytical report are formulated at a national “dissemination seminar” to which the local PASEC team invites both the relevant decision makers at the education ministry, and representatives of different stakeholders (teachers, teacher unions, inspectors, parents, donor agencies). During several days, the local PASEC team and the counselors present their results, encourage discussions and seek final policy conclusions. Media are equally invited to this seminar so that policy outcomes find their immediate reflection in press articles and often in the radio and on TV. As results are of interest not only for the evaluated country itself, a separate press release is sent from the CONFEMEN secretariat to the news agencies in other member countries. Moreover, flyers under the joint responsibility of the CONFEMEN and the national education ministry are prepared with the main results. Finally, selected results are presented at the following ministerial meeting of the CONFEMEN.

After the evaluation process is over, data are made available to external researchers for further analysis. The CONFEMEN secretariat actively promotes the use of these data through the cooperation with various universities and research institutions, the co-supervision of master theses, internship programs etc. To the knowledge of the CONFEMEN secretariat, currently at least twenty researchers work on studies based on the PASEC database. Exchange between researchers and the PASEC counselors at the secretariat has already led to a refinement of the econometric analysis carried out for the draft of CONFEMEN country reports, as well as to a complementary household survey for Senegal (by Cornell University (USA) and the laboratory of applied economics of INRA (France)) which will enable a deeper understanding of some of the issues raised by the initial PASEC evaluation.

The local PASEC team is supposed to be maintained as a small evaluation unit within the national education ministry. For this reason, PASEC counselors organize an annual training session at which at least one member of each national team is invited to participate. By doing so the CONFEMEN intends to encourage national ministries to institutionalize the evaluation of their education systems.

Figure 1 presents a schematic overview over the evaluation process in any typical PASEC country.

Figure 1: Major steps of a typical PASEC evaluation



3. Country-case studies

The discussion of concrete country-cases will illustrate in the following how the general procedure outlined above is implemented in practice. At the same time, the country-case studies will enable us to focus on major policy topics assessed within PASEC evaluations, and to see to what extent PASEC results have been directly relevant for educational reform.

The evaluations selected for the case-studies are those for which PASEC country reports have been most recently completed. While this may have the disadvantage of long-term effects not being measurable, it has the advantage to draw on the personal experience of PASEC counselors currently in office. Countries selected are Senegal with the 6-year panel evaluation, and Togo and Guinea discussed jointly for their common thematic orientation. Finally, additional insights regarding individual points of interest will be drawn from other country evaluations.

3.1. Managing the impact of PASEC in Senegal

The PASEC panel in Senegal started in 1995 with a representative panel of students at the beginning of 2nd grade. These students were followed until the year 2000 where those who did not repeat any class completed their primary education. At the end of each academic year, the students were tested in math and French to obtain information about their progress over time. Moreover, the general PASEC questionnaires for teachers, directors and students were administered for complementary information in 2nd grade, and, in a somewhat reduced version, in subsequent years.

From the very beginning, the main objective of the panel analysis was to gain some insights into the effects of grade repetition, an extremely common practice in francophone sub-Saharan Africa. In 2000, average primary education repetition rates in francophone sub-Saharan Africa were at 20%, against 10% in anglophone Africa and 2% in OECD countries (UIS 2002, MINEDAF 2002). At the political level, during the early 1990s, it was felt that reducing grade repetition might foster the objective of universal primary education. First, the limited number of places available at given resources would not be blocked by the same students during several years, and second, reducing repetition might reduce early drop-out. However, this gain in enrolment was supposed to come about at the detriment of learning, so

that a quality-quantity trade-off was anticipated. The need was felt to assess the concrete impact on quality, and the PASEC panel evaluation was considered an adequate tool to provide this analysis.

From the presentation of the initial results for the first three grade levels at the CONFEMEN ministerial meeting in 1998 (CONFEMEN 1999, pp. 99ff.) until the final publication (CONFEMEN / MEN 2004), the outcomes of the analysis have been consistent, robust and clear: on average, a Senegalese primary student who repeats his grade does not do significantly better than another student who does not, provided that family background, school environment etc. are corrected for, and provided that they start from the same performance level at the beginning of the year of analysis. Grouping students into equally sized groups of good, intermediate and weak students according to their achievement on PASEC tests at the national level, the effect of repetition appears to be insignificant for the weaker, and detrimental for the better ones. Moreover, it turns out that while most repeaters belong to the third of weak students, more than one quarter of repeaters belong to the intermediate and even the best students. Results thereby provide evidence for substantial ill-targeting. Finally, the hypothesis of repetition leading to higher drop-out also finds some empirical support in the panel analysis.

All in all, PASEC results clearly indicate that a policy of reduced repetition will not have any negative impact on education quality, and that it is definitely one of the most efficient ways to facilitate enhanced enrolment and to avoid early drop-out in Senegal.

These results were presented to stakeholders of the education system at the dissemination seminar, to the minister and to his cabinet. Acceptance at the level of the ministry was high. While repetition had been legally limited to 10% at the beginning of the 1980s, a new ministerial decision reaffirmed it in 2003 after PASEC results had been presented. Moreover, the ministry decided too to fully prohibit repetition between grades 1 and 2, grades 3 and 4, and grades 5 and 6. However, repetition cannot simply be reduced by decree, as enforcement may be very difficult if the actual decision makers within the context of each school do not agree. In fact, teachers, directors, inspectors and even parents, all seemed to be strongly convinced about the necessity of repetition in order to enable weak students to acquire the necessary basis for any further learning in higher grades. A survey among Senegalese primary

teachers in the 1999 PASEC sample indicated that 77% conceive grade repetition as an efficient or even very efficient tool to foster student learning.

One major problem seems to be that teachers tend to compare the performance of any student with the average performance in their class. Now obviously, if a relatively weak student proceeds to a higher grade, he tends to remain weak as compared to his classmates. If he repeats his grade, however, he tends to obtain a higher (closer to average) position in his new class. This change in position is typically perceived as a positive effect of repetition. To judge about the progress the student really makes, he needs to be compared to an unchanged peer group, however. Moreover, even the positive effect of repetition on the relative position of a repeater in his new class appears to fade over time.

PASEC tried to inform the policy debate with its analytical results and to provide sound arguments to convince the different stakeholders concerned. In Senegal, the media, in particular the print media, but also radio and television, showed a relatively high interest in following the debate. About ten different press articles were written on the topic, not only in French but also in various local languages. To engage a more direct debate with stakeholders, participants of the seminar of dissemination proposed to hold similar regional seminars involving the relevant decision makers on the ground. It was pointed out that one highly relevant target group - after inspectors - should also be the “pedagogical counselors” who are responsible for teacher training in Senegal.

As an exceptionally rich database, the panel data for Senegal have also attracted considerable attention by external researchers. Most notably, a co-operation with INRA (France) and Cornell University (USA) has started in 2002 with the objective to supplement the existing data by a complementary household survey. Research based on the augmented dataset will provide additional insights into the linkages between social background and repetition, as well as between repetition and early drop-out.

It should be noted that a similar exercise as in Senegal has been carried out in Côte d’Ivoire and in Burkina Faso. For Côte d’Ivoire, results are almost identical to those discussed above. They may be politically even more relevant there as current repetition rates are still around 20% there. However, given the general political instability in the country, the management of PASEC results was considerably less effective so far. In Burkina Faso, the panel is much

shorter, the information has not yet been fully analyzed and no seminar of dissemination was organized because data collection had to be broken up due to a lack of funding. Nevertheless, taking (provisional) results for the three countries together enabled PASEC to present a consistent picture at the CONFEMEN ministerial meetings in 2000 and 2002 and thereby to promote reduced repetition as a general objective for countries in francophone sub-Saharan Africa. PASEC also intends to publish a book on the combined results for all three countries.

3.2. Managing the impact of PASEC in Togo and Guinea

In both Guinea and Togo, PASEC evaluations were carried out with a special thematic focus on teacher training and non-civil servant teacher contracts. These issues were put forward by the respective ministries of education because prior reforms in teacher employment policies called for an assessment of their impact on education quality.

While Togo had started to hire teachers on a non-civil servant contractual basis from 1983 onwards, this process started in Guinea only in 1998. In Guinea, teachers were provided with a brief pedagogical training of six to nine months' duration - much shorter than the traditional training of two to three years older teacher had received. In Togo, they generally did not receive any training at all. In Guinea, the new teachers were recruited with at least upper secondary educational attainment (baccalauréat, BAC); in Togo, while the formal requirement was the same, lower secondary attainment (BEPC) was considered sufficient in practice. In both countries, the idea of the policy change had been to reduce cost in order to be able to meet the schools' rising demand for new teachers.

At the same time, for different reasons, the risk was felt that these reforms might have a negative impact on students' learning:

- It was feared that hiring teachers on a contractual basis – implying considerably lower salaries and less job security – might have a detrimental impact on their motivation and thereby, indirectly, on students' performance in their class.
- It was considered that pedagogical training of less than one year might be too brief to effectively prepare the future teachers for their activity in class.
- In the case of Togo, it was felt that teachers with only BEPC might not sufficiently master the subject matter they were supposed to teach.

All in all, it was anticipated that reforms would reduce the cost of hiring more teachers, but at the price of considerably reduced education quality.

PASEC results show that this is actually not the case. Overall, PASEC results indicate that the new teachers employed on a contractual basis are by no means doing worse than their colleagues. In some particular context, they seem to do even better. There may be several explanations for this phenomenon:

First, while reducing the duration of teachers' pedagogical training, its content was reformed so that the reduction in duration may be compensated by higher relevance and quality. In the context of the new World Bank initiated teacher training program in Guinea (Formation Initiale des Maîtres de Guinée, FIMG), for instance, high emphasis was put on practical teaching experience under the guidance of senior teachers. This may have been an effective innovation in the training program.

Second, teachers' own educational attainment beyond BEPC has been frequently shown to be of rather limited relevance for primary teachers' performance (CONFEMEN 1999). This may be related to the quality of the education teachers themselves receive, or to the low relevance of the academic knowledge acquired for practical teaching in class. PASEC data for other countries showed, for instance, that there is no significant correlation between teachers' educational attainment above or below the BAC and their ability to correctly point out the mistakes in a dictation (Michaelowa 2003). Moreover, there is some evidence that teachers with educational attainment beyond the BAC may be less motivated on their job (Michaelowa 2002).

Third, non-civil servant contracts may create an incentive for teachers to work hard in order to retain their current post, or to move to a permanent position later in their career.

To a certain extent such arguments were welcomed by politicians because they justify their policy reforms carried out under the pressure of budgetary constraints. At the same time, there seems to be a certain lack of understanding and even discontent given that the educational attainment considered inefficient and unnecessary here is still much less than the standard requirement in industrialized countries. Moreover, there is considerable pressure by teachers.

Teachers employed under the new conditions argue that they are underpaid and suffering unsustainably unstable working conditions while doing the same work as other teachers. And older teachers complain that the new programs might undermine the esteem for the teaching profession as a whole. These positions were stated rather clearly during interviews carried out by the local PASEC team alongside with the quantitative assessment.

Under these conditions, dialogue with the different stakeholders seems to be particularly important. Unfortunately, in both Togo and Guinea, teacher unions did not attend the dissemination seminar. While they were initially invited to attend, disputes about daily allowances finally prevented their participation. Their exclusion from discussions is rather unfortunate as it is from their side that most resistance against the policy reforms was to be expected.

Teachers, ministry officials, inspectors and principals present at the seminar agreed upon the necessity of high quality pedagogical training for teachers. The flyer with PASEC results for Togo jointly edited by the CONFEMEN secretariat and the Togolese ministry of education strongly argues for a lower entrance requirement to the teaching profession in terms of educational attainment (only BEPC), but a compulsory pedagogical training period for all new teachers.

In terms of actual policy developments as well, PASEC results have led the Togolese authorities to stick to the BEPC as the minimum entrance requirement for primary teachers. It remains to ascertain, however, that initial pedagogical training for all teachers will indeed be ensured in the future. In Guinea, the idea is to continue the training program initiated in the framework of the FIMG pilot project by the World Bank. As the country belongs to the group of countries included in the “Fast Track” Initiative, donor funding for a consistent policy plan for future teacher training should be available. This also shows the importance of inter-linking PASEC activities with the activities of other international organizations and bilateral donors. Generally, it can be felt that the interest for PASEC results within the national ministries of education, as well as the general discussion and implementation of these results, is highly correlated with the perceived usefulness of these outcomes in the context of other international programs such as “Education for All”, the “Poverty Reduction Strategy Processes” (PRSPs) etc. Due to the rise of these initiatives in recent years, interest for PASEC results has also risen considerably. Through regular meetings with members of national

PASEC teams and through several short-term workshops with individual country teams, PASEC tries to assist efforts to fulfill the requirements of these international programs.

Just like the issue of high repetition rates discussed in the context of Senegal, the issue of engaging teachers on non-civil servant contracts and the issue of adequate teacher training are also relevant for many other francophone African countries currently introducing policy reforms in these areas. To bring PASEC results to the attention to decision makers in these other countries, analytical outcomes were presented at the CONFEMEN ministerial meeting in Ouagadougou in 2002, and a press release was sent by the CONFEMEN secretariat to the relevant media in all member states. It should be noted, however, that countries currently experiment with many different types of new teacher contracts and training programs. Therefore, results for one country may not necessarily hold for another country, and case by case analysis appears to be necessary. Currently, PASEC evaluations with a similar thematic orientation are going on for Mali and Niger, and it will be interesting to compare the results. An ongoing World Bank survey of teachers in Senegal, Mali, Burkina Faso and Niger will add additional complementary information.

3.3. Further examples

While Senegal, Guinea and Togo have been discussed in detail, it may be worthwhile mentioning a few developments in other countries as well. In Madagascar, for instance, PASEC results had shown in 1997/98 that continuous teacher training had a negative effect on student achievement. This result came as a surprise and prompted a discussion on why this might be the case. It turned out that continuous teacher training was primarily held during class hours resulting in reduced teaching. This practice has been changed since then.

In Cameroon, as a result of the first PASEC assessment, the ministry created a special evaluation unit to ensure the institutionalisation of educational evaluation. Generally, it seems that the successful follow-up of PASEC evaluations depends a lot on the stability of the national PASEC team. If there is no fixed group of people involved in educational assessment within the ministry, exchange becomes difficult and the information about what actually happened as a result of the initial PASEC analysis becomes very difficult to obtain. Moreover, if the national team is not in a position to supervise and support the implementation of results, it is hardly probable that anything will happen. If members of the team keep changing, the

capacity of a follow-up at the national level is very low. In such a situation, the continuous training modules offered by the PASEC counselors also become rather inefficient and the cross-national network of experts built up through regular workshops with representatives of all national teams also becomes less effective by far. In some country cases like the Central African Republic or Côte d'Ivoire, the stability of the PASEC team, the implementation of PASEC results, and the interest in educational policy all together has also been greatly affected by violent conflict and political unrest.

4. Conclusions

The above discussion shows the difficulties in managing the results of an international evaluation program such as PASEC. While many provisions are in place to ensure the adequate discussion and implementation of results, actual policy outcomes are subject to the stability of the national PASEC team, general political stability, and the capacity to mobilize additional financial means to finance reforms. Experience has shown that PASEC outcomes attract most attention if they can be directly fed into national education sector strategies or poverty strategies raising the chances for donor funding. Moreover, it is vital that, right from the beginning, host countries of a PASEC evaluation have a genuine interest in the thematic orientation of results. Optimally, like in the case of Senegal, Togo and Guinea, PASEC should provide answers to strongly relevant national policy issues. As a consequence, PASEC outcomes were received well, and actual policy developments were consistent with PASEC results.

It should be noted, however, that in all three country cases discussed here, PASEC results were more or less consistent with the policy reforms launched by the national authorities in the first place. It will be interesting to see whether PASEC results will also be implemented once they contradict the initial policy stance of the national government.

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